AFCTN Test Report 94-067

AFCTB-ID 94-044

TMSS Parsing Test

MIL-L-8031E, Amendment One

List of Applicable Publications

Document Type Definition

MAXIMA Corporation

DISA Contract #DCA100-93-D-0065

Quick Short Test Report

16 May 1994

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MIL-L-8031E, Amendment One

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For:

MAXIMA Corporation

DISA Contract #DCA100-93-D-0065

Quick Short Test Report

16 May 1994

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DISCLAIMER

Air Force CALS Test Bed

Notification of Test Results

16 May 1994

This notice documents the results of an Air Force CALS Test Bed (AFCTB) Quick Short Test Report (QSTR) evaluation of data submitted by:

MAXIMA Corporation

Identified as follows:

Title:	**MIL-L-8031E, Amendment One**
	List of Applicable Publications DTD Parsing Test
Program:	**DISA**
Program Office:	**DISA**
Contract No.:	**DCA100-93-D-0065**
QSTR No.:	**AFCTB-ID 94-044**

Received on the following media: **3.5" Diskette**

The results of the AFCTB Quick Short Test evaluation are as follows:

MIL-STD-1840A Media Format:	**N/A**
MIL-D-28000A IGES:	**N/A**
MIL-M-28001A SGML:	**Pass**
MIL-R-28002A Raster:	**N/A**
MIL-D-28003 CGM:	**N/A**

Formal results with associated disclaimer are documented and available from the AFCTB.

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1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of this informal test is to analyze Air Force
Document Type Definitions (DTDs) for Standard Generalized
Markup Language (SGML) syntax, using several commercial and
public domain SGML parsers, prior to placing them in the
Defense Information Systems Agency (DISA) Asset Source for
Software Engineering Technology (ASSET) repository.

2. Test Parameters

Test Plan: AFCTB 94-044

Date of
Evaluation: 16 May 1994

Evaluator: George Elwood
                                    Air Force CALS Test Bed
                                    DET 2 HQ ESC/AV-2P
                                    4027 Colonel Glenn Hwy
                                    Suite 300
                                    Dayton OH 45431-1672

Data
Originator: Kay Hill
                                    MAXIMA Corporation
                                    2372 Lakeview Drive
                                    Beavercreek OH 45431
                                    (513) 427-5888

Data
Description: Technical Manual Test
                                            1 DTD

Data
Source System:

                    Text/SGML
                            SOFTWARE
                                    Unknown

Evaluation Tools Used:

                    MIL-M-28001 (SGML)
                            PC 486/50
                                    Exoterica *XGMLNormalizer v1.2e3.2*
                                    Exoterica *Validator v2.2 ex1*
                                    SoftQuad *Author/Editor v2.1*
                                    McAfee & McAdam *Sema Mark-it v2.3*
                                    Public Domain *sgmls v1.1*

Standards
Tested: MIL-M-28001A

3. 1840A Analysis

3.1 External Packaging

The 3.5" diskette was hand delivered to the Air Force CALS Test Bed (AFCTB), and it was not enclosed in any type of container.

The files received by the AFCTB were not MIL-STD-1840A files. The files were not named per the standard conventions, as the stated purpose of the evaluation was the basic data structure.

4. SGML Analysis

The AFCTB has several parsers available for evaluating submitted DTD and text files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. These products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings unless specified in the report.

The goal was to configure the DTD under analysis as it would normally be used. However, for this analysis it was necessary to modify the DTD adding the "DOCTYPE doc [" statement to the start and the companion "]>" to the end of the DTD under evaluation, as stated in the comments of the DTD. If the parser did not support a formal file pointing to the location of the ISO character sets, this was added.

The DTD under evaluation, MIL-L-8031E, Amendment one, List of Applicable Publications, called for a companion MIL-M-38784C DTD. MIL-M-38784C, Amendment three DTD, delivered on the same diskette as the DTD to be evaluated- was used. This DTD was used without change except to insert the location of the ISO character set files.

```
<!-- MIL-L-8031E DTD -->

D031EA0.A1 --> D784CB0.A3
```

The following notes apply to the parsing analysis as indicated in the ensuing paragraphs.

Note 1.   Entity parameters defined more than once is a vaild SGML construct. The warnings in this analysis do not indicate any problems.

Note 2.   The occurrences of warnings "references defined, but not used," appeared because portions of the called DTD, i.e., MIL-M38784C, were not used. They were not used because the entity definitions of the DTD under analysis altered the execution path in the called DTD. The warnings in this analysis do not indicate any problems.

4.1 Exoterica Validator

The DTD file was evaluated using the Exoterica *Validator exl* parser. The basic DTD was modified by placing the concrete syntax file and "<!DOCTYPE doc [" at the start, and the "]>" at the end. The parser reported 40 errors which related to the missing instance and are not considered errors for this analysis.

The parser reported 36 warnings of two types. The first type was a parameter entity declared more than once. See Note 1 above.

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 1,
     used in "\xgml\9444.dtd", line 1:
   A parameter entity name has been declared more than once.
   The entity is "%frnt".
   <!ENTITY % frnt "(idinfo, warnpage?, chginssht?, lep, verstat?,
chgrec?, co
          ^^^^

-->
```

The second type of warnings related to elements defined but not used in any content model.   See Note 2 above.

```
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "ADDRESS".
```

4.2 Exoterica XGML Normalizer

The DTD file was parsed using the Exoterica *XGMLNormalizer* parser.
The concrete syntax and "<!DOCTYPE doc [" were added to the start, and
"]>" to the end of the file. No errors or warnings were issued by
this utility.

4.3 Sema Mark-it

The DTD file was evaluated using McAfee & McAdam's *Sema Mark-it v2.3*
parser. The file was modified by adding the concrete syntax and
"<!DOCTYPE doc [" to the start, and "]>" to the end of the file. The
base line D784CB0.A3 file was used. The only change made to this file
was to save it using UNIX format to remove the DOS end of file
character.   One error was reported and this relates to a missing in-
stance. This is not considered an error for this report.

4.4 Public Domain sgmls

The DTD file was evaluated using the Public Domain *sgmls* parser
version 1.1. The file was modified by adding the "<!DOCTYPE doc [" to
the start, and "]>" to the end of the file as stated in the comments
in the DTD. The basic 38784C.A3 file was used as the point to file.
This file was modified by removing the start and end statements. This
DTD remained modified to point to the ISO character sets. Two
warnings were reported by the parser.   Both were duplicate
definitions. See Note 1 above.

The following is the command line used to parse the DTD.

```
C:\EN450>sgmls concrete.syn 9444.dtd -f9444.log -c9444.cap
-s -u -r -l -g -d -p -e
```

4.5 SoftQuad Author/Editor

The DTD file was evaluated using SoftQuad's *Author/Editor* parser. The DTD was modified to point to the previously parsed basic 38784C.A3 DTD. This file had been set to point to the ISO character set. One error was reported during this operation. This product reported an ambiguous content model in the subfig element in the basic 38784C. DTD. The tag is shown below.

```
Error in Document Type Declaration at offset 2067 of the input stream,
on line 1 of the document: Ambiguous content model.
An instance of element GRAPHIC could simultaneously match two or more
tokens in the content model.
Error occurred in the content of parameter entity "m38784c".

<!ELEMENT subfig    - - ((graphic | macrograph) & figtable? &
                        legend?) >
<!ATTLIST subfig    %secur; >
```

SoftQuad has identified this as an error in their product which will be corrected in the next release of their software.

5. Conclusions and Recommendations

The file D031EA0.A1, MIL-L-8031E, Amendment One DTD, conforms to the SGML syntax of ISO Standard 8879, as required by the CALS MIL-M-28001B specification.

The errors, warnings, and comments reported by the parsers used in this evaluation do not indicate any syntactical variances, nor indicate any problem that would invalidate the effective application of this DTD.

6. Appendix A - Detailed SGML Analysis

6.1 Exoterica Validator

```
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 1,
     used in "\xgml\9444.dtd", line 1:
   A parameter entity name has been declared more than once.
   The entity is "%frnt".
   <!ENTITY % frnt "(idinfo, warnpage?, chginssht?, lep, verstat?,
chgrec?, co
            ^^^^
-->
<!-- **Warning** in "i:\dtd\784c.dtd" (entity "%m38784c"), line 1,
     used in "\xgml\9444.dtd", line 1:
   A parameter entity name has been declared more than once.
   The entity is "%bodyele".
   <!ENTITY % bodyele "(chapter, chapter+, ddchapter?)" >

<!ENTITY % service
            ^^^^^^^
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "ADDRESS".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "APPENDIX".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "BRK".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CHAPTER".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CHGINSSHT".
-->
```

```
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CHGLIST".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "CHGREC".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDCHAPTER".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDDESC".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDINDEX".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDINTRO".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDLIST".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DDSHEET".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DOC".
-->
```

```
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "DOCPART".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "FOLDOUT".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "FOLDSECT".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "GLOSSARY".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "ILLUSLIST".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "INDEX".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "INSERTPG".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "INTRO".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "PGBRK".
-->
```

```
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "PGNO".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "PRECAUT".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "PREFACE".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "REAR".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "REMOVEPG".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "SAFESUM".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "SECTION".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "SHORTTITLE".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "TABLELIST".
-->
```

```
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "VOLUME".
-->
<!-- **Warning** in "\xgml\9444.dtd", line 1:
   An element is not allowed in the document instance because it does not
   appear in any accessible content model or it is completely excluded.
   The element is "WARNPAGE".
-->
<!-- Capacity points/limits:
     TOTALCAP =107807/200000
     ENTCAP   =12768/200000
     ENTCHCAP =11205/70000
     ELEMCAP  =4960/70000
     GRPCAP   =25824/70000
     EXGRPCAP =704/70000
     EXNMCAP  =1184/70000
     ATTCAP   =33600/200000
     ATTCHCAP =890/70000
     AVGRPCAP =16416/70000
     NOTCAP   =96/70000
     NOTCHCAP =160/70000
     IDCAP    =0/70000
     IDREFCAP =0/70000
     MAPCAP   =0/70000
     LKSETCAP =0/70000
     LKNMCAP  =0/70000
-->
```

*<<<<< ERRORS FROM THIS POINT ON RELATE TO NO DOCUMENT INSTANCE AND ARE NOT CONSIDERED
FOR THIS REPORT >>>>>*

```
<!-- **Error** in "\xgml\9444.dtd", line 1:
   The document instance must consist of at least one tag or data character.
   The following element can start: "DOCLOAPS".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   The start tag of an element that has one or more required attributes must
   not be omitted.
   Attribute "DOCID" of element "DOCLOAPS" is REQUIRED.
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "FRONT".
-->
```

```
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "IDINFO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TMIDNO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "DOCNO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "DOCTYPE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "PRTITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "PRTITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An element must not end before its content model is completely satisfied.
   The element with unsatisfied content is "PRTITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "DISCL".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   The start tag of an element that has one or more required attributes must
   not be omitted.
   Attribute "TYPE" of element "DISTRIB" is REQUIRED.
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "AUTHNOT".
-->
```

```
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "PUBDATE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "IDINFO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "LEP".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "ORIGDATE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "LEP".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   The start tag of an element with CDATA, RCDATA or EMPTY content must not be
   omitted.
   The element is "CONTENTS".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "FOREWORD".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "PARA0".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "FOREWORD".
-->
```

```
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "FRONT".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "BODY".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "LOAPCHAP1".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "MAINSERS".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "MAINSERS".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An element must not end before its content model is completely satisfied.
   The element with unsatisfied content is "MAINSERS".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "LOAPCHAP1".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "LOAPCHAP2".
-->
```

```
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TITLE".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "PARTNO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "TMIDNO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   A start tag with a start tag minimization of minus ("-") must not be
   omitted.
   The element is "DOCNO".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "LOAPCHAP2".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "BODY".
-->
<!-- **Error** in "\xgml\9444.dtd", line 1:
   An end tag that has been declared inomissible ("-") must not be omitted.
   The element is "DOCLOAPS".
-->
<!-- Capacity points/limits:
        TOTALCAP =107807/200000
        ENTCAP   =12768/200000
        ENTCHCAP =11205/70000
        ELEMCAP  =4960/70000
        GRPCAP   =25824/70000
        EXGRPCAP =704/70000
        EXNMCAP  =1184/70000
        ATTCAP   =33600/200000
        ATTCHCAP =890/70000
        AVGRPCAP =16416/70000
        NOTCAP   =96/70000
        NOTCHCAP =160/70000
        IDCAP    =0/70000
        IDREFCAP =0/70000
        MAPCAP   =0/70000
```

```
        LKSETCAP =0/70000
        LKNMCAP  =0/70000
-->
<!-- 40 errors and 36 warnings reported. -->
```

6.2 Exoterica XGMLNormalizer Parser

No reported errors or warnings.

6.3 Public Domain sgmls Log

```
sgmls: In file included at 9444.dtd, line 37:
        Warning at c:\sgmlpub\784.dtd, line 110 in declaration parameter 4:
        Duplicate specification occurred for "%frnt"; duplicate ignored
sgmls: In file included at 9444.dtd, line 37:
        Warning at c:\sgmlpub\784.dtd, line 166 in declaration parameter 4:
        Duplicate specification occurred for "%bodyele"; duplicate ignored
TOTALCAP 107177
ENTCAP 12768
ENTCHCAP 10540
ELEMCAP 4960
GRPCAP 25824
EXGRPCAP 736
EXNMCAP 1184
ATTCAP 33600
ATTCHCAP 890
AVGRPCAP 16416
NOTCAP 96
NOTCHCAP 163
IDCAP 0
IDREFCAP 0
MAPCAP 0
LKSETCAP 0
LKNMCAP 0
```

6.4   Sema Mark-it Log

```
<!--*** file:C:\XGML\9444.DTD line:148 pos:4630
Document entity ended illegally
(or illegal end of entity in the main document)-->
```

6.5   SoftQuad Author/Editor Log

```
C:\USR\SQPS\BIN>mkrls -a -S cals.dec 9444.dtd
DOS/4GW Protected Mode Run-time   Version 1.6
Copyright (c) Rational Systems, Inc. 1990-1992
Compiling 9444.dtd into 9444.rls.

Error in Document Type Declaration at offset 1105 of the input stream,
on line 1 of the document: Ambiguous content model.
An instance of element FIGTABLE could simultaneously match two or more
tokens in the content model.
Error occured in the content of parameter entity "m38784c".
```

Below is the area in the DTD that was addressed.

```
<!ELEMENT subfig    - - ((graphic | macrograph) & figtable? &
                         legend?) >
<!ATTLIST subfig    %secur; >
```